Regarding the Claims:

Please cancel claims 44-68.

Please amend claim 83 as follows:

83. (Twice amended) A system for creating a droplet from a jet of a flow cytometer comprising:

a. a nozzle body having an inner surface;

b. a nozzle tip having an inner surface, wherein said nozzle body and said nozzle tip establish a nozzle volume;

c. a seal located off of said inner surface of said nozzle tip and to which both said nozzle body and said nozzle tip are responsive;

d. a sheath fluid port located within said nozzle volume wherein said sheath fluid port introduces a sheath fluid;

e. a substance introduction port located within said nozzle volume; and

f. a free fall area below said nozzle tip and within which said droplet forms.

Please add claims 86-110 to the application as follows:

86. A system for creating a droplet from a jet of a flow cytometer as described in claim 83, wherein said nozzle tip is sealingly attached to said nozzle body.

87. A system for creating a droplet from a jet of a flow cytometer as described in claim 83, further comprising:

an oscillator to which said sheath fluid is responsive;
a substantially isolated unidirectional coupling which couples said oscillator to said nozzle volume through use of a directional isolator situated between said nozzle body and said oscillator wherein said coupling permits said oscillation to create oscillation in substantially one direction; and

an alternating voltage source having an alternating voltage amplitude of less than one hundred millivolts connected to said oscillator.

88. A system for creating a droplet from a jet of a flow cytometer as described in claim 83, further comprising:

a substantially isolated unidirectional coupling which couples an oscillator to said nozzle volume through use of a directional isolator situated between said nozzle body and said oscillator wherein said coupling permits said oscillation to create oscillation in substantially one direction; and
an oscillator to which said substantially isolated unidirectional coupler and said nozzle volume are responsive.

89. A system for creating a droplet from a jet of a flow cytometer as described in claim 83, further comprising:

an oscillator to which said sheath fluid is responsive; and
a unidirectional coupling which couples said oscillator to said sheath fluid.

90. A system for creating a droplet from a jet of a flow cytometer as described in claim 83 or 86, wherein said nozzle body and said nozzle tip are continuously converging.

91. A system for creating a droplet from a jet of a flow cytometer as described in claim 90, further comprising a tip joint of said inner surfaces of said nozzle body and said nozzle tip.

92. A system for creating a droplet from a jet of a flow cytometer as described in claim 83, further comprising a flow convergence zone within said nozzle volume, wherein said substance introduction port is located within said flow convergence zone.

93. A system for creating a droplet from a jet of a flow cytometer as described in claim 92, further comprising a location adjuster to which said substance introduction port is responsive.

94. A system for creating a droplet from a jet of a flow cytometer as described in claim 83, further comprising:
an oscillator to which said sheath fluid is responsive; and
an alternating voltage source having an alternating voltage amplitude of less than one hundred millivolts connected to said oscillator.

95. A system for creating a droplet from a jet of a flow cytometer as described in claim 83, further comprising an oscillator to which said nozzle volume is responsive.

96. A system for creating a droplet from a jet of a flow cytometer as described in claim 95, further comprising a unidirectional coupling which couples said oscillator to said sheath fluid.

97. A method of creating a droplet from a jet of a flow cytometer, comprising the steps of:

establishing a nozzle volume of a nozzle body and a nozzle tip, said nozzle body and said nozzle tip each having an inner surface;
sealing said nozzle volume off of said inner surface of said nozzle tip; and
forming at least one droplet.

98. A method of creating a droplet from a jet of a flow cytometer as described in claim 97, further comprising the steps of:

introducing a flow of sheath fluid into said nozzle volume;
introducing a flow of a substance at a location within said sheath fluid; and
allowing said sheath fluid to exit from said nozzle volume;
wherein said step of forming at least one droplet comprises forming at least one droplet from said sheath fluid after allowing said sheath fluid to exit from said nozzle volume.

99. A method of creating a droplet from a jet of a flow cytometer as described in claim 97 or 98, wherein said step of sealing said nozzle volume off of said inner surface of said nozzle tip comprises sealing said nozzle volume at an outer surface of said nozzle tip.

100. A method of creating a droplet from a jet of a flow cytometer as described in claim 99, wherein said step of sealing said nozzle volume off of said inner surface of said nozzle tip further comprises sealingly attaching said nozzle tip to said nozzle body at an edge insert of said inner surface of said nozzle body.

101. A method of creating a droplet from a jet of a flow cytometer as described in claim 97, wherein said step of sealing said nozzle volume off of said inner surface of said nozzle tip comprises sealingly attaching said nozzle tip to said nozzle body at an edge insert of said inner surface of said nozzle body.

102. A method of creating a droplet from a jet of a flow cytometer as described in claim 98, further comprising the steps of:
establishing a substantially isolated unidirectional coupling with said nozzle volume which couples an oscillator to said nozzle volume through use of a directional isolator situated between said nozzle body and said oscillator; and
creating a substantially isolated unidirectional oscillation within said nozzle volume using an alternating voltage with an amplitude of less than one hundred millivolts for said oscillator.

103. A method of creating a droplet from a jet of a flow cytometer as described in claim 98, further comprising the step of initiating a substantially unidirectional oscillation through use of a directional isolator situated between said nozzle body and an oscillator wherein said substantially unidirectional oscillation occurs within said nozzle volume.

104. A method of creating a droplet from a jet of a flow cytometer as described in claim 98, further comprising the step of unidirectionally applying an oscillation to said sheath fluid.

105. A method of creating a droplet from a jet of a flow cytometer as described in claim 98, further comprising the step of continuously converging said sheath fluid.

106. A method of creating a droplet from a jet of a flow cytometer as described in claim 98, further comprising the step of converging said sheath fluid in a convergence zone, and wherein said step of introducing a flow of a substance at a location within said sheath fluid comprises introducing said flow of a substance in said convergence zone.

107. A method of creating a droplet from a jet of a flow cytometer as described in claim 106, further comprising the step of adjusting the location at which said substance is introduced within said convergence zone.

108. A method of creating a droplet from a jet of a flow cytometer as described in claim 98, further comprising the steps of:

establishing an oscillator coupled to said nozzle volume; and
applying an alternating voltage with an amplitude less than one hundred millivolts to said oscillator.

109. A method of creating a droplet from a jet of a flow cytometer as described in claim 98, further comprising the step of initiating an oscillation within said nozzle volume.

110. A method of creating a droplet from a jet of a flow cytometer as described in claim 98, further comprising the step of unidirectionally applying an oscillation to said sheath fluid.